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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,290

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Katsuya Takigawa

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EXAMINER

WEISS, PAMELA HL

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,290	Applicant(s) TAKIGAWA ET AL.	
	Examiner PAMELA WEISS	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1- 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Baba (US 2004/0053794).

Regarding Claims 1, 2 and 5:

Baba discloses a lubricative composition (Abstract) for industrial machinery and equipment, ([0001] industrial machines) in gear oil ([0053]) said composition comprising a base oil selected from mineral oils, fats and oils, synthetic oils and mixtures of two or more of them (Abstract and [0009]), and at least one additive selected from the following components (A) to (D) :

Component (A) : (A-1) a phosphorus-containing carboxylic acid

Baba discloses a β -dithiophosphorylated propionic acid (Abstract and [0009])
and/or

(A-2) a thiophosphoric ester; component (This optional component is not present in Baba)

Component(B) : a dispersant viscosity index improver; ([0038] commonly known additives such as viscosity index improvers; and [0047] wherein the viscosity index improver may be dispersant type)

Component (C) : (This optional component is not present in Baba)

Component (D): an ester oiliness improver. (This optional component is not present in Baba)

Regarding Claims 3 and 4.

Baba discloses the limitations set forth above. Baba also discloses the composition of claim 1 as set forth above and incorporated herein. Baba further discloses that the composition may be used as a hydraulic oil, or in other ways such as a compressor oil, turbine oil, bearing oil or gear oil. ([0053])

Since the composition as disclosed by Baba is the same composition set forth in Claim 1 and Baba states that it may be used in other ways, the composition is intrinsically capable of being used for paper machines or slide guides.

A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Thus, the language stating that the lubricating oil composition is for paper machines or for slide guides is not afforded patentable weight.

3. Claims 1-4 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yokota et al. (US 2002/0035043A1)

Regarding Claims 1-4, and 7-9.

Yokota et al. discloses a lubricative composition for industrial machinery and equipment (cutting and grinding [0010 and 0011]), said composition comprising a base oil selected from mineral oils, fats and oils, synthetic oils and mixtures of two or more of them ([0011] an ester base oil), and at least one additive component (D) :

(Optional components A-C are not present in Yokota et al.)

Yokota et al. also discloses the lubricating oil composition comprising the additive comprises the ester oiliness improver of said component (D) which is an ester of a polyhydric alcohol and a fatty acid of monobasic acids. ([0045] and [0065]).

Yokota et al. discloses that there is no limitation on the combination of alcohols and carboxylic acids ([0067-0074]) Yokota et al. further discloses the oiliness improver may be a full ester or a partial ester ([0075])

Yakota et al. discloses a polyhydric alcohols ([0017] including Sorbitan), monobasic acids ([0021]) and polybasic acids ([0022]). Yakota also discloses that the ester may be any combination of alcohols and acids ([0067]) and may result in partial or full esters when using a polyhydric alcohol ([0073]). the esters of (D-1) to (D-3) would intrinsically result from the possible combinations of alcohols and acids of Yakota thereby meeting the claim limitations:

(D-1): an ester of a polyhydric alcohol and an unsaturated fatty acid containing a partial ester with the degree of esterification of 1 and a partial ester with the degree of esterification of 2 or more;

(D-2) : a whole ester of a polyhydric alcohol and a mixture of fatty acids, wherein the fatty acids are short-chained fatty acids and long-chained fatty acids; and

(D-3) : an ester of a polyhydric alcohol ([0071]) and a branched saturated fatty acid ([0047] wherein the acid may be a branched saturated carboxylic acid) containing a partial ester with the degree of esterification of 1 and a partial ester with the degree of esterification of 2 or more.

The composition of Yokota et al. as disclosed is the same composition as claimed and will therefore be capable of use as a gear oil composition, an for paper machines and for slide guides. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Thus, the language stating that the lubricating oil composition is a gear oil or a sliding machine oil is not afforded patentable weight.

Regarding Claim 9.

Yokota et al. discloses the limitations set forth above. Yokota discloses that the composition may be used as a cutting or grinding oil to avoid deterioration of tools.

([0217])

Yokota et al. discloses the claimed composition. As such, it will intrinsically be capable of being used as hydraulic oil.

A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body

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of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Thus, the language stating that the lubricating oil composition is a hydraulic oil is not afforded patentable weight.

4. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Baba (WO 00/11122).

Regarding Claims 1-4 and 6

Baba discloses a lubricative composition (Abstract) for industrial machinery (and equipment Pg L1-10 for hydraulic apparatus), said composition comprising a base oil selected from mineral oils, fats and oils, synthetic oils and mixtures of two or more of them (P3 L18-20), and at least one additive selected from the following components (A) to (D) :

Component (A):

(A-2) a thiophosphoric ester; component (P3 L20-27 and P4 L1-3) (P6 -P7 L3)

Baba also discloses

Component (B): a dispersant viscosity index improver; (P23 L3-12 wherein the viscosity index improve may be a dispersant viscosity index improver

The optional components of A-1, C and D are not present in Baba.

The composition of Baba as disclosed is the same composition as claimed and will therefore be capable of use as a gear oil composition, an for paper machines and

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for slide guides. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Thus, the language stating that the lubricating oil composition is a gear oil or a sliding machine oil is not afforded patentable weight.

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Havelly (US 2,961,408).

Regarding Claims 1-4:

Havelly discloses a lubricant composition comprising a base oil of mineral oil (C1 L52-54) and additive (C-2) in the form of stearic acid (Stearic acid is a C18 monocarboxylic acid falling within the claimed carbon range of 7 to 29 C1 L65-68). The optional components of A, B and D are not present in Havelly.

The composition of Havelly as disclosed is the same composition as claimed and will therefore be capable of use as a gear oil composition, and for paper machines and for slide guides. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ

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478, 481 (CCPA 1951). Thus, the language stating that the lubricating oil composition is a gear oil, an industrial machinery oil or a sliding machine oil is not afforded patentable weight.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba (US 2004/0053794) as applied to claims 1-5 above in view of Yokota et al. (US 2002/0035043A1)

Regarding Claims 7-9

Baba discloses the limitations set forth above. Baba also discloses that it is possible to add commonly known lubricating oil additives such as viscosity index improver, etc. ([0038]).

Baba does not disclose an oiliness agent (D).

Yokota et al. discloses a lubricative composition for cutting and grinding [0010 and 0011], said composition comprising a base oil selected from mineral oils, fats and oils, synthetic oils and mixtures of two or more of them ([0011] an ester base oil), and an additive of an oiliness improver which is an ester of a polyhydric alcohol and a fatty acid of monobasic acids. ([0045] and [0065]). Yokota discloses that the oiliness improver will enhance the lubricating properties of the oil. ([0045])

Yokota et al. further discloses the oiliness improver may be a full ester or a partial ester ([0075]). Yokota et al. discloses that there is no limitation on the combination of alcohols and carboxylic acids ([0067-0074]) to make the oiliness improver. Thus, intrinsically, disclosing the following esters of (D-1) to (D-3):

(D-1): an ester of a polyhydric alcohol and an unsaturated fatty acid containing a partial ester with the degree of esterification of 1 and a partial ester with the degree of esterification of 2 or more;

(D-2) : a whole ester of a polyhydric alcohol and a mixture of fatty acids, wherein the fatty acids are short-chained fatty acids and long-chained fatty acids; and

(D-3) : an ester of a polyhydric alcohol and a branched saturated fatty acid containing a partial ester with the degree of esterification of 1 and a partial ester with the degree of esterification of 2 or more.

It would have been obvious to a person having ordinary skill in the art at the time of invention to add the oiliness additive of Yokota et al. to the composition of Baba to improve the lubricating properties of the oil of Baba.

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Modified Baba discloses the same composition as claimed and will therefore be capable of use as a hydraulic oil, gear oil composition, and for industrial machinery and equipment, and for paper machines and for slide guides. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Thus, the language stating that the lubricating oil composition is hydraulic oil is not afforded patentable weight.

9. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba (WO 00/11122) as applied to claims 1-4 and 6 above in view of Yokota et al. (US 2002/0035043A1)

Regarding Claims 7-9

Baba discloses the limitations set forth above. Baba also discloses that it is possible to add commonly known lubricating oil additives such as viscosity index improver, etc. (P18 L2-12 other additives may be used including an oiliness agent)

Baba does not disclose the oiliness agent as an ester of a polyhydric alcohol and a fatty acid of monobasic acids.

Yokota et al. discloses a lubricative composition for cutting and grinding [0010 and 0011], said composition comprising a base oil selected from mineral oils, fats and oils, synthetic oils and mixtures of two or more of them ([0011] an ester base oil), and

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an additive of an oiliness improver which is an ester of a polyhydric alcohol and a fatty acid of monobasic acids. ([0045] and [0065]). Yokota et al. discloses that there is no limitation on the combination of alcohols and carboxylic acids ([0067-0074]) Yokota discloses that the oiliness improver will enhance the lubricating properties of the oil. ([0045])

Yokota et al. further discloses the oiliness improver may be a full ester or a partial ester ([0075]) thus disclosing the following esters of (D-1) to (D-3):

(D-1): an ester of a polyhydric alcohol and an unsaturated fatty acid containing a partial ester with the degree of esterification of 1 and a partial ester with the degree of esterification of 2 or more;

(D-2) : a whole ester of a polyhydric alcohol and a mixture of fatty acids, wherein the fatty acids are short-chained fatty acids and long-chained fatty acids; and

(D-3) : an ester of a polyhydric alcohol and a branched saturated fatty acid containing a partial ester with the degree of esterification of 1 and a partial ester with the degree of esterification of 2 or more.

It would have been obvious to a person having ordinary skill in the art at the time of invention to add the oiliness additive of an ester of a polyhydric alcohol and a fatty acid of monobasic acid of Yokota et al. to the composition of Baba to improve the lubricating properties of the oil of Baba and since Baba contemplates the addition of an oiliness agent.

Modified Baba discloses the same composition as claimed and will therefore be capable of use as hydraulic oil, and for industrial machinery and equipment, and for

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paper machines and for slide guides. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Thus, the language stating that the lubricating oil composition is a hydraulic oil is not afforded patentable weight.

10. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over by *Havely* (US 2,961,408) as applied to claims 1-4 further in view of *Yokota et al.* (US 2002/0035043A1)

Regarding Claims 7-9

Havely discloses the limitations set forth above. *Havely* also discloses that other additives may be used in the composition. (C3 L63-68).

Yokota et al. discloses a lubricative composition for cutting and grinding [0010 and 0011], said composition comprising a base oil selected from mineral oils, fats and oils, synthetic oils and mixtures of two or more of them ([0011] an ester base oil), and an additive of an oiliness improver which is an ester of a polyhydric alcohol and a fatty acid of monobasic acids. ([0045] and [0065]). *Yokota et al.* discloses that there is no limitation on the combination of alcohols and carboxylic acids ([0067-0074]) *Yokota*

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discloses that the oiliness improver will enhance the lubricating properties of the oil.

([0045])

Yokota et al. further discloses the oiliness improver may be a full ester or a partial ester ([0075]) thus disclosing the following esters of (D-1) to (D-3):

(D-1): an ester of a polyhydric alcohol and an unsaturated fatty acid containing a partial ester with the degree of esterification of 1 and a partial ester with the degree of esterification of 2 or more;

(D-2) : a whole ester of a polyhydric alcohol and a mixture of fatty acids, wherein the fatty acids are short-chained fatty acids and long-chained fatty acids; and

(D-3) : an ester of a polyhydric alcohol and a branched saturated fatty acid containing a partial ester with the degree of esterification of 1 and a partial ester with the degree of esterification of 2 or more.

It would have been obvious to a person having ordinary skill in the art at the time of invention to add the oiliness additive of an ester of a polyhydric alcohol and a fatty acid of monobasic acid of Yokota et al. to the composition of Havelly to improve the lubricating properties of the oil of Havelly.

Modified Havelly discloses the same composition as claimed and will therefore be capable of use as hydraulic oil, and for industrial machinery and equipment, and for paper machines and for slide guides. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for

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completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Thus, the language stating that the lubricating oil composition is a hydraulic oil is not afforded patentable weight.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is Fletschinger et al. (2002/0016266A1) which discloses a base oil for metal working fluid, gear fluid and hydraulic fluid with polyol partial esters (D), dithiophosphoric acid esters (A-1) and thiophosphoric acid ester (A-2) and viscosity index improver (B).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAMELA WEISS whose telephone number is (571)270-7057. The examiner can normally be reached on Mon.-Thur. 7:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Glenn A Caldarola/
Acting SPE of Art Unit 1797

PW